

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claims 1-13 (canceled)

14. (currently amended) A purified human nucleic acid sequence which encodes an alpha subunit of a sodium channel comprising a nucleic acid sequence selected from the group consisting of:
 - (a) the nucleic acid of SEQ ID NO:1;
 - (b) a full-length complement of (a); and
 - (c) a nucleic acid sequence having at least 95% identity to the full-length nucleic acid sequence in (a) or (b).

Claims 15-16 (canceled)

17. (previously presented) A vector comprising any one of the sequences of claim 14.

Claims 18-19 (canceled)

20. (previously presented) An isolated cell harboring a vector of claim 17.

Claims 21-22 (canceled)

23. (currently amended) The purified nucleic acid of claim 14, wherein said alpha subunit of a sodium channel nucleic acid sequence is SEQ ID NO:1 and encodes a protein that possesses a sodium channel function.
24. (currently amended) The purified nucleic acid of claim 14, wherein the presence of said nucleic acid in a sample of a subject indicated that the subject has said alpha subunit of a sodium channel is associated with an increased susceptibility to risk of idiopathic generalized epilepsy.

25. (currently amended) The purified nucleic acid of claim 24, wherein said alpha-subunit of a-sodium-channel nucleic acid comprises the following mutation:
- (a) a mutation at position 828 of SEQ ID NO: 1;
 - (b) a mutation at position 3978 of SEQ ID NO: 1; or
 - (c) a mutation at position 5581 of SEQ ID NO: 1;; and
 - (d) any combination of (a)–(e).

Claims 26-29 (canceled)